**Features of Plate Tectonics Shoebox Project**

**Earth & Oceanic Studies 2016**

**Objective:** Using a small box (shoebox, small parcel box, etc.) student will create a model of one specific geologic feature (for example: a specific mountain range, volcano, deep ocean trench, island or island chain, rift valley, mid-ocean ridge, fault line, etc.) produced by plate tectonic action. The model will include a cross sectional view of Earth’s interior showing the specific plate tectonic action that creates the chosen feature as well as an overhead (bird’s eye) view of the feature itself showing how the feature appears on the globe. These two separate views must align correctly on the model – recall example shown in class. Student models must include directional arrows, appropriate vocabulary and descriptions, and a generous amount of detail alongside accurate graphics/depictions of feature and Earth’s interior.

**Checklist:**

* Choose a geologic feature on the globe which was or is actively being produced by plate tectonic action. The name of my chosen feature is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.
* Use the Essentials of geology textbook and other resources to research, learn about, and record the specific details of the feature including as a minimum:
  + Latitude and Longitude coordinates (or range if island chain, mountain range, trench, ridge, valley, etc.) \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
  + Appearance from multiple angles
  + Formation – how was the feature created?
  + Timeline of formation – when was the feature created?
  + Current plate tectonic action below feature
  + Type of associated tectonic boundary (if applicable)
  + Type of lithosphere (crust) involved
  + Names tectonic plates involved and their direction/rate of movement
  + Potential or recurring natural disasters associated with your chosen feature along with explanation of how these natural disasters are related to plate tectonic movement
  + Estimate of population affected or associated with your chosen feature
  + Any cultural or socio-economic information related to the feature. For example, many volcanoes that are part of the Ring of Fire bordering the Pacific Plate provide very fertile land which forms the basis of many island community economies (farming of coffee, tea, coco, etc.).
  + Future of the feature – what will the area be like in the future? Will the mountains get bigger? Will the feature disappear entirely?
* Obtain a small box to use for the model (preferable one with no lids or caps – so you would cut the lid edges off of a shoebox and tape the sides smooth)
* Create the model and add researched information
  + Technically your model only needs to use two sides – the top for the bird’s eye view, and one side to represent the below surface cross sectional view. You can use the other two sides as informational sides, however some information must accompany the two separate views of the feature

**Due: Friday, February 24th Score: /60**